

Qwest Foundation for Education

Competitive Sub-grant Application Assurance Sheet

Project Title: NEO 2 Mobile Lab Amount of Request: \$ 9,972.44

District Name: Bonneville School District Number: #93

Name of Certificated Teacher (or "lead teacher" if more than one): Jason Curtis

Name of School currently teaching at: Discovery Elementary

Years taught in Idaho K-12 public education: 1

Content area(s) that you are teaching in Idaho K-12 public education: Reading, Math, Science, Social Studies, English

I certify that if I receive a Qwest Foundation for Education Grant –

- I agree to create a video highlighting my project for the purposes of sharing best practices with other Idaho K-12 teachers.
- I agree to do one presentation on my project to other Idaho K-12 teachers before October 31, 2009.
- I agree to submit an electronic report to the Idaho State Department of Education before October 31, 2009.

Superintendent Name (print)	E-mail	Telephone
<u>CHARLES SHACKETT</u>	<u>cshackett@d93.k12.id.us</u>	<u>(208) 525-4406</u>
Signature <u>Charles Shackett</u>		
Principal Name (print)	E-mail	Telephone
<u>Kelli Marlowe</u>	<u>marlowek@d93.k12.id.us</u>	<u>(208) 552-7711</u>
Signature		
Teacher or Lead Teacher (print)	E-mail	Telephone
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Signature <u>Jason Curtis</u>		

Step 2: The Overall Picture of my Project

Bonneville School District #93 is very concerned with student performance on Language ISATS and Direct Writing Assessment and has that as an area of focus. In order to better enable my students to perform on these two assessments, my project is to purchase the NEO 2 Mobile Lab from Renaissance Learning. The NEO 2's are special laptops designed specifically for use in the classroom in order to enhance student learning. These laptops provide the word processing and keyboarding aspects of a regular computer, without the distractions of Instant Messaging, chatting, or internet searching. These laptops are also built to run many of the Renaissance programs such as A.R. Quizzes and Math Facts in the Flash. In addition to these programs, the laptops have a typing tutor program and 380 writing lessons. With this project I also want to make my assessments more effective and motivating.

Today's elementary students live in a technologically-driven world. Most students have computers in their home where they e-mail, chat, or blog with their peers. In a way, these students are writing every single day. But when it comes time to begin a writing curriculum, it is met with groans and protests. I believe by incorporating the NEO 2 keyboarding laptops into the classroom, it will connect school writing projects with technology they are using in their own homes. This will increase student motivation making them more willing to engage in writing.

Another benefit to using the NEO 2's is that they encourage peer-to-peer interaction. Through the use of infrared technology, a student is able to beam his or her paper to a peer in order for it to be edited and revised. Once the revisions are made the paper is beamed back to the original owner where they can continue to work on their assignment. This way, a student can get input on his or her paper multiple times during the writing process and from multiple peers, thus improving the overall quality of the paper.

A year long independent study of the Wellesley Public Schools in Wellesley, Massachusetts¹ analyzed the impact of AlphaSmart Laptops, the predecessor of the NEO 2, on its schools. Some of the results of the study included an increased amount of student writing, improvement in the quality of their writing, and increased efficiency of the drafting and editing processes. The conclusion of the study stated that "AlphaSmart laptops were shown to increase student writing production, quality, and technological fluency when available to students on a one-to-one basis. In addition, teachers benefited from better classroom management and more time for individual instruction."

The NEO 2 Mobile Lab also comes with an assessment tool that allows me to input test questions into the computer and then the questions are relayed to the NEOs. Students are then able to answer the questions without fear of getting them wrong because of poor punctuation or incorrect spelling. This takes a lot of stress out of the testing experience.

With this project, I plan on increasing student's ISAT Language scores and Direct Writing Assessment scores, by giving them access to the technology they use in their personal lives by incorporating it into classroom writing activities.

¹ Russell, M., Bebell, D., Cowan, J., & Corbelli, M. (2003). An AlphaSmart for each student: Does teaching and learning change with full access to word processors? *Computers and Composition*, 20, (1)51-76.

Step 3: Innovative Use of Technology Currently Used in my Classroom

For the last year I have been using the EInstruction Classroom Response System in my classroom. With this system I am able to conduct both formative and summative assessments in order to guide my instruction. I instantly know whether my class understands a concept. Since the students can answer questions anonymously, they are not reluctant to attempt to answer! I can pull up reports that show me information that I could not create without the software. Teachers have limited time, and would find it difficult to go through each student's work to analyze whether they all missed (or a majority) one problem on a 50 question assignment. But with this response system, the computer does this analysis for me and I can immediately correct my instruction.

Although I have been extremely pleased with this system, it does have its limitations. With the EInstruction system, I am limited to multiple choice, yes/no, or true/false questions, but I am not able to conduct short answer or essay questions. With the NEO 2 2Know! Toolbar, I will be able to create assessments which allow for multiple choice, true or false, and most importantly, short answer and essay questions. I know that the NEOs will increase student motivation. Every time I use the EInstruction Blue Clickers with my students they shout with joy. Not once during my time using EInstruction have I had a negative response from my students.

Last year I spent an hour a week in our computer lab using the PLATO software for writing. I gave each student assignments from both the writing process and mechanics strands. I feel that this software was beneficial in giving my students a conceptual knowledge of writing, but I need something else to help that conceptual knowledge translate into real writing. I feel that the NEOs will aid in this goal. I continue to use PLATO software, but I am not able to put every student on the software because our school computer lab is being used for a specialized reading program. I have to do these activities as whole-class instruction, using the EInstruction Blue Clickers for individual participation when given multiple choice options in the software. This is really not helping the students to "practice" and learn how to write.

Other technology uses in my classroom revolve around Renaissance Learning software. I use Accelerated Math for at least one hour a day and every morning the students work in Math Facts in a Flash. My students take Accelerated Reader quizzes upon completion of books they are reading. All of these programs have been purchased by the district, and their use is highly encouraged.

* I am the Technology Mentor for my school. My responsibilities include making sure that teacher computers are functioning properly, but more important, I am to help them integrate and use the software that the school district has purchased. I love incorporating technology into the classroom and I am trying to get other teachers to recognize the benefits of using available technology in their teaching. I recently conducted an in-service on the benefits of using Accelerated Math and I also taught about the EInstruction Response System's application to teaching. Whenever I find strong technology that will aid in my instruction, I will do everything I can to motivate other teachers to incorporate the technology into their classrooms.

Step 4: Project Proposal Narrative

This project is basically to bring projects that would be done in a computer lab into the classroom. With the NEO 2 Mobile Lab, my sixth grade classroom turns into a computer lab, the only difference being that students cannot use the internet. This is a necessity for my class because we do not have access to our computer lab. Our school is currently piloting a reading program call Fast ForWord which is a computer based program that is designed to remediate struggling readers. This is a school wide program, so our computer lab is being used only for that program. Other than taking the ISATS in the spring, my class will at no point be able to use the computer lab. I feel that this is very damaging. Teachers in middle school and especially high school expect each student to be proficient in the use of computers. Most students can get this training at home, but a large demographic of my school is lower income families who do not have access to a computer. If they do not get the training in school, they will not get the training at all. With the NEOs I can give my students daily training in keyboarding and word processing, thus increasing their proficiency. Without the NEOs, the only classroom practice they get on a computer is doing two minutes a day of Math Facts in a Flash and maybe one A.R. test every couple of weeks. This is not enough. I only have four computers, for which I am grateful, in my classroom. But from a time management standpoint, there is no way that I could allow my entire class of 28 students time to do word processing.

Every day each student will come into class and spend the first 20 minutes of the day on the typing tutor program and Math Facts in a Flash. My goal is that by the end of the school year each student will type at least 25 words per minute with the correct technique. During Language Arts instruction, each student will spend the first 20 minutes of the lesson working on one of the 380 writing lessons available with the lab, the remainder of the time working on a writing assignment that correlates with our adopted district curriculum. Most pre-writing components will be done on loose leaf paper, and then the drafts, editing/revising, and final draft will be completed with the NEOs. The NEOs will also be employed during Science, Social Studies, and Reading in order to gather instant formative data to guide my instruction and also to conduct summative assessments.

I have discussed my desire to have the NEO 2 Mobile Lab with many of the other teachers in my building, and more specifically with my grade level cohorts. Initially, I will be the only person using this system. Once I understand how to use the NEOs and all the software that comes with the lab, I will then instruct the other teachers on how to use the lab in their classrooms. In talking with the Renaissance Learning representative for the NEOs, we were able to include in the lab an additional 7 infrared receivers so that each grade level would have one. This makes an easy transition of the lab from one class room to the next; all you have to do is push the cart to the class that needs it. As I mentioned in Step 3, being the Technology Mentor I will do everything possible to get the other teachers in my building to use the NEOs. This grant will not only help my sixth grade students, but has the potential to benefit an additional 300 students in the school. I have discussed this project with my principal and he has given me his full support. I have also consulted with the Technology Department for my school district and I have their support. Brenda Curtis, the software integration specialist for the district, has a very good relationship with Renaissance Learning and is always looking for new technology to propose to

the district. She is very interested to see how NEOs work and their impact on classroom learning.

This project is extremely feasible. The lab comes with six hours of on-site training to help teach me how to install and sync all the software to the NEOs. District technology support staff will also attend so they are aware of any particular issues that may arise with the technology itself. The training will also teach me how to effectively use the lab in my classroom. Plus, with my experience with the EInstruction Response System, integrating this lab into my classroom curriculum will proceed seamlessly. In fact, Renaissance Learning is sending me a trial kit that includes two NEO 2 laptops, infrared receiver, and all the software necessary to run everything to use while waiting for a response on the grant. This will help me have all the nuances of the program figured out so I will be able to easily transfer the program to full scale.

There is no issue with sustainability in this project; I will be able to use this lab for many years. Renaissance Learning specifically designed this laptop to be durable and withstand an elementary classroom. These laptops are so durable that you could knock it off a desk and there will be no damage to it. Can a regular laptop make that claim? Renaissance Learning will provide software updates as they become available to ensure that this lab and its software will always be up to date.

I anticipate that by implementing this project into my classroom that I will have more highly motivated students in the area of writing and also more proficient writers. I anticipate that this program will increase scores on the language portion of the ISATS and Direct Writing Assessment. I also anticipate that this project will help my students become proficient in keyboarding skills, better preparing them for middle school and high school. I expect a complete change in attitude when it comes to writing in my classroom!

Step 5: Scope and Sequence

Application:

1. Upon hearing of being awarded the grant I will immediately contact Renaissance Learning in order to schedule the six hour training. This will allow me to integrate this technology as soon as possible.
2. As soon as everything is in order technologically, I will begin using the NEOs daily. Here is how they will be used:
 - a. Math Facts in a Flash
 - b. Typing Tutor
 - c. Writing Lessons
 - d. Formative and Summative Assessments
 - e. Accelerated Reading Quizzes
3. Within two months of receiving the lab, I will conduct an in-service to the faculty on use of the lab and how best to integrate this technology into their lessons.

Objectives:

1. Students will be able to type at least twenty-five words per minute with correct keyboarding.
2. Students will produce papers with greater quality and quantity.
3. Students will exhibit an increased motivation to write.
4. Students will dedicate more time to the revision and editing process, thus increasing the quality of their own writing as well as their peers.
5. After a full year of using the lab, all of my students will score proficient on the Language ISAT.

Evaluation Plan:

1. Scores from Spring 2008 Language ISAT will be compared to Spring 2009 and then compared to the overall district average increase for the 6th Grade.
2. A survey of student attitude toward writing will be conducted before and after using the NEOs.
3. Writing samples will be taken before and after using the NEOs analysis will be done using district curriculum rubrics.
4. Student's Language ISATS scores will increase.

Step 6: Budget Narrative

The NEO 2 Mobile Lab costs \$8,850.00. Here is an itemized break down of everything that comes with the lab.

Hardware:

The lab comes with 30 NEO 2 laptops, a storage cart with hub, and 30 packs of alkaline batteries for running the NEOs. In order to link the NEOs to Renaissance programs and my computer, an infrared Renaissance Receiver with cord is included. Five USB cables are provided in order to connect the NEOs directly to my computer without using the infrared receiver.

Software:

The lab comes with the AlphaSmart Manager CD which allows me to upload assignments and tests directly to each student's NEO. The AccelTest software lets the NEOs access Math Facts in the Flash and other Renaissance programs. The 2Know! software gives me the ability to conduct formative assessments on the fly and have the students respond from their NEOs. The AlphaBeam CD gives the NEOs the capability to beam assignments from one NEO to another. Each of these programs comes with a User Manual.

Training:

The lab comes with six hours of on-site professional development in order to instruct me on hardware installation and usage of software. The professional development will also instruct me in best practices for using the lab. There is also an AlphaSmart Training CD.

As I am planning on sharing this technology with the other teachers in my school, Renaissance Learning has included seven extra infrared receivers. These receivers cost \$693.00. The shipping and processing freight fee of 4.5% of the order totals \$429.44. The total cost for the project, which includes the NEO 2 Mobile Lab, the seven extra infrared receivers, and shipping and processing fees is \$9,972.44

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Budget Sheet for NEO 2 Mobile Lab

Item	Description	Quantity	Total Price
NEO 2 Mobile Lab with Training	<p>This item includes the following:</p> <p>Hardware Professional Development(hourly)</p> <p>Onsite Fee (in addition to six professional development hrs/day)</p> <p>Renaissance Receiver with Cable</p> <p>AccelTest 3.x Serial Number</p> <p>2Know! Resource Guide and Toolbar CD</p> <p>AccelTest 3.1 Installation CD</p> <p>NEO 1 and NEO 2 User's Manual</p> <p>AlphaSmart Manager User Manual</p> <p>NEO 2 and SmartApplet Quick Guide</p> <p>Documentation CD</p> <p>3-Pack Alkaline Batteries</p> <p>USB IR Pod only</p> <p>USB Cable</p> <p>AR on NEO 2 Wall Poster</p> <p>Keyboarding Wall Charts for NEO 1 and NEO 2</p> <p>NEO 2 Keyboard Only</p> <p>AlphaBeam CD only v3.2.4</p> <p>AlphaSmart Manager CD Version 3.0 for NEO 1 and NEO 2</p> <p>AlphaSmart Cart with Hub</p> <p>NEO by AlphaSmart Training CD</p>	<p>1</p> <p>6</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>5</p> <p>1</p> <p>1</p> <p>1</p> <p>30</p> <p>1</p> <p>5</p> <p>1</p> <p>1</p> <p>30</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>	\$8,850.00
Renaissance Receiver Kit for NEO 2	Additional Infrared receivers to all the mobile lab to be used in additional classrooms	7	\$693.00
Shipping/Processing Freight Fee (Carts) 4.5% of order		1	429.44
Grand Total: \$9,972.44			